# **Camp Lejeune Marine Corps Base**

**Size:** 151,000 acres

Mission: Provide housing, training facilities, logistical support, and administrative supplies for Fleet Marine Force

units and other assigned units; conduct specialized schools and other training as directed

HRS Score: 36.84: placed on NPL in October 1989

IAG Status: Federal Facility Agreement signed in February 1991

Contaminants: Battery acid, fuels and used oils, paints and thinners, PCBs, pesticides, solvents, and metals

Media Affected: Groundwater, surface water, sediment, and soil

Funding to Date: \$72.5 million

Estimated Cost to Completion (Completion Year): \$133.6 million (FY2038)
Final Remedy in Place or Response Complete Date for All Sites: FY2011



### Jacksonville, North Carolina

## **Restoration Background**

Investigations at Camp Lejeune identified 176 sites, including 86 leaking underground storage tank (UST) sites. Contaminants released from past storage and disposal operations have migrated to a shallow aquifer, several surface water bodies, and a deep aquifer used for drinking water.

In 1991, a Federal Facility Agreement under CERCLA was signed. Since then, 18 operable units, comprising 42 of the 91 Installation Restoration (IR) sites, have been identified as requiring additional investigation or remediation.

Between FY83 and FY88, the installation completed an Initial Assessment Study for 72 sites and Site Inspections for 8 sites, conducted 26 Remedial Investigations and Feasibility Studies (RI/FSs), signed Records of Decision (RODs) for 19 sites, and completed Remedial Design for 10 sites. Three Interim Remedial Actions at two sites and six Time-Critical Removal Actions (TCRAs) were completed. Final Remedial Actions (RAs) were completed at four sites. Remediation systems were installed and are operating at four sites. Since FY88, the installation's UST program has completed site assessments (SAs) at 76 sites and corrective action plans (CAPs) at 34. Remediation systems were designed and implemented at 23 sites, and are operating at 16. The installation has requested closure and no further action (NFA) at 26 sites. Eleven UST sites were moved to the IR program for further action.

In FY97, RI Phase I investigations were completed at 6 sites, RIs were completed at 12 sites, a groundwater modeling study was finished, air-sparging and in-well aeration Treatability Studies (TSs) were completed at 2 sites, a surfactant-enhanced aquifer remediation TS was initiated, and a TCRA for polychlorinated biphenyl (PCB)—contaminated soil was initiated. Long-term monitoring was performed

at nine sites, and RAs were conducted at three sites. Final RODs were signed for four sites. The SA phase was completed at five UST sites; one was found to require NFA. The designs were completed at four UST sites, and implementation was completed at three others. Corrective action was under way at 12 UST sites. For the third time, Camp Lejeune was awarded the Secretary of the Navy Environmental Cleanup Award for Marine Corps installations.

The installation formed a technical review committee in FY88 and converted it to a Restoration Advisory Board (RAB) in FY95. The installation also completed a community relations plan in FY90 and established an information repository and an administrative record in FY91.

## **FY98 Restoration Progress**

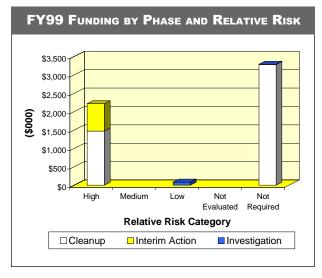
The installation completed a TCRA for PCB-contaminated soil at Site 36, initiated an Engineering Evaluation and Cost Analysis (EE/CA) for Non-Time-Critical Removal Actions (NTCRAs) at Sites 84 and 85, and initiated natural attenuation evaluations at Sites 35, 36, 54, 69, 73, and 86. Monitored natural attenuation will probably be one of the primary remedies at these sites. Groundwater monitoring ended at Site 24 after no contaminants of concern were found. Monitoring began at Sites 3, 35, and 69. RAs continued at 14 UST sites, with NFA indicated at USTs 16, 27, and 43. Remediation was completed at UST sites 22, 32, and 36. Natural attenuation began at 14 UST sites. The construction phase began at UST sites 9, 50, and 62. The installation initiated negotiations with regulators about land use control assurance plans (LUCAPs) and implementation plans. Final RODs for Sites 36, 43, 44, 54, and 86 were prepared and will be signed after the final resolution of LUCAP issues. An amendment to the final ROD for Site 3 was prepared after completion of a design phase TS. The amended ROD will be signed after resolution of

LUCAP issues.

Project coordination meetings were held with the state EPA to discuss new guidelines for obtaining NFA status for sites. A Web site was established to provide information about the IR program to regulators, Navy and Marine Corps personnel, contractors, RAB members, and the general public. Conversion of the administrative record to CD-ROM was initiated.

### Plan of Action

- Resolve LUCAP issues and sign final RODs for Sites 36, 43, 44, 54, and 86 in FY99
- At Site 3, sign amended ROD after resolution of LUCAP issues and complete RA in FY99
- · Prepare and sign final ROD for Site 69 in FY99
- Complete EE/CA at Sites 84 and 85 and NTCRA at Site 85 in FY99
- Complete surfactant-enhanced aquifer remediation TS at Site 88 and implement construction at UST site 67 in FY99
- In FY99, complete first CERCLA five-year review and obtain NFA status for approximately 15 UST sites
- Complete conversion of the administrative record to CD-ROM and place on the Web site in FY99
- Complete CAP for UST site 86 and SA for UST site 46 in FY99



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